NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

1724 F Street, Northwest Washington 25, D. C.

15 10 1951

M.L. 290 (Monthly list of documents released by the NACA during May 1951)

Libraries in most of the important cities throughout the country, as well as libraries of schools, manufacturers, and other organizations dealing with aeronautics, are supplied copies of these publications for references.

TECHNICAL NOTES

- TN 2346 An Iterative Transformation Procedure for Numerical Solution of Flutter and Similar Characteristic-Value Problems.

 By: Myron L. Gossard.
- TN 2347 Effect of Aspect Ratio and Sweepback on the Low-Speed Lateral Control Characteristics of Untapered Low-Aspect-Ratio Wings Equipped with Retractable Ailerons.

 By: Jack Fischel and John R. Hagerman.
- TN 2348 Effect of Aspect Ratio on the Low-Speed Lateral Control Characteristics of Unswept Untapered Low-Aspect-Ratio Wings.

 By: Rodger L. Naeseth and William M. O'Hare.
- TN 2350 On the Second-Order Tunnel-Wall-Constriction Corrections in Two-Dimensional Compressible Flow.

 By: E. B. Klunker and Keith C. Harder.
- TN 2352 Spin-Tunnel Investigation of the Effects of Mass and Dimensional Variations on the Spinning Characteristics of a Low-Wing Single-Vertical-Tail Model Typical of Personal-Owner Airplanes.

 By: Walter J. Klinar and Jack H. Wilson.
- TN 2353 Charts and Tables for Use in Calculations of Downwash of Wings of Arbitrary Plan Form.

 By: Franklin W. Diederich.
- TN 2356 Two-Dimensional Transonic Flow past Airfoils.

 By: Yung-Huai Kuo.
- TN 2358 Effect of Vertical-Tail Area and Length on the Yawing Stability Characteristics of a Model Having a 45° Sweptback Wing.

 By: William Letko.
- TN 2359 Floating Characteristics of a Plain and a Horn-Balanced Rudder at Spinning Attitudes as Determined from Rotary Tests on a Model of a Typical Low-Wing Personal-Owner Airplane.

 By: William Bihrle, Jr.

- TN 2361 Turbulence-Intensity Measurements in a Jet of Air Issuing from a Long Tube.

 By: Barney H. Little, Jr., and Stafford W. Wilbur.
- TN 2362 Torsional Strength of Stiffened D-Tubes.

 By: E. S. Kavanaugh and W. D. Drinkwater.
- TN 2363 On the Application of Mathieu Functions in the Theory of Subsonic Compressible Flow past Oscillating Airfoils.

 By: Eric Reissner.
- TN 2364 On Two-Dimensional Flow After a Curved Stationary Shock (with Special Reference to the Problem of Detached Shock Waves).

 By: S. S. Shu.
- TN 2365 Analytical Evaluation of Aerodynamic Characteristics of Turbines with Nontwisted Rotor Blades.

 By: William R. Slivka and David H. Silvern.
- TN 2366 Friction at High Sliding Velocities of Oxide Films on Steel Surfaces
 Boundary-Lubricated with Stearic-Acid Solutions.
 By: Robert L. Johnson, Marshall B. Peterson and Max A. Swikert.
- TN 2367 General Plastic Behavior and Approximate Solutions of Rotating Disk in Strain-Hardening Range.

 By: M. H. Lee Wu.
- TN 2371 Possible Application of Blade Boundary-Layer Control to Improvement of Design and Off-Design Performance of Axial-Flow Turbomachines. By: John T. Sinnette, Jr., and George R. Costello.
- TN 2374 Effect of Initial Mixture Temperature on Flame Speed of Methane-Air, Propane-Air and Ethylene-Air Mixtures.

 By: Gordon L. Dugger.
- TN 2383 On a Solution of the Nonlinear Differential Equation for Transonic Flow past a Wave-Shaped Wall.

 By: Carl Kaplan.

REPORTS

Rept. 971 Theoretical Stability Derivatives of Thin Sweptback Wings Tapered to a
Point with Sweptback or Sweptforward Trailing Edges for a Limited
Range of Supersonic Speeds.
By: Frank S. Malvestuto, Jr. and Kenneth Margolis.
Formerly issued as TN 1761.

- Rept. 972 The Effect of Torsional Flexibility on the Rolling Characteristics at Supersonic Speeds of Tapered Unswept Wings.

 By: Warren A. Tucker and Robert L. Nelson.

 Formerly issued as TN 1890.
- Rept. 990 An Analysis of Supersonic Aerodynamic Heating with Continuous Fluid Injection.

 By: E. B. Klunker and H. Reese Ivey.

 Formerly issued as TN 1987.
- Rept. 992 Theoretical Comparison of Several Methods of Thrust Augmentation For Turbojet Engines.

 By: Eldon W. Hall and E. Clinton Wilcox.

 Formerly issued as RM E8H11.
- Rept. 996 Free-Space Oscillating Pressures near the Tips of Rotating Propellers.

 By: Harvey H. Hubbard and Arthur A. Regier.

 Formerly issued as TN 1870.
- Rept. 999 Investigation of the NACA 4-(3)(08)-03 and NACA 4-(3)(08)-045 Two-Blade Propellers at Forward Mach Numbers to 0.725 to Determine the Effects of Compressibility and Solidity on Performance.

 By: John Stack, Eugene C. Draley, James B. Delano, and Lewis Feldman.

 Formerly issued as ACR 4A10 and ACR 4B16.

TECHNICAL MEMORANDUMS

- TM 1258 Flight Performance of a Jet Power Plant. III Operating Characteristics of a Jet Power Plant as a Function of Altitude.

 By: F. Weinig.
- TM 1273 Resonance Sound Absorber with Yielding Wall. By: S. N. Rzhevkin.
- TM 1295 Gas Flow with Straight Transition Line.

 By: L V. Ovsiannikov.
- TM 1298 On the Problem of Gas Flow over an Infinite Cascade Using Chaplygin's Approximation.

 By: G. A. Bugaenko.

